

Claims

[c1] A composition comprising a stresscopin peptide, wherein said stresscopin peptide comprises at least 18 contiguous amino acids of the sequence set forth in any one of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:6.

[c2] A composition according to Claim 1, wherein said peptide comprises at least 30 contiguous amino acids of the sequence set forth in any one of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:6.

[c3] The composition according to Claim 1, wherein said composition further comprises a pharmaceutically acceptable carrier.

[c4] A method of appetite suppression, the method comprising administering to an individual the composition of Claim 3.

[c5] A method for cardioprotection, the method comprising administering to an individual the composition of Claim 3.

[c6] A method for reduction of edema, the method comprising comprising administering to an individual the composition of Claim 3.

[c7] A method for reduction of inflammation, and organ graft rejection the method comprising administering to an individual the composition of Claim 3.

[c8] A method for the reduction of hypertension, the method comprising administering to an individual the composition of Claim 3.

[c9] A method for the treatment of stress related to trauma, the method comprising administering to an individual the composition of Claim 3.

[c10] A method of treatment for affective disorders, the method comprising comprising administering to an individual the composition of Claim 3.

[c11] An isolated nucleic acid molecule comprising a cDNA sequence encoding a mammalian stresscopin protein that will hybridize under stringent conditions of 50 ° C or higher in the presence of 0.1XSSC to the sequence set forth in any one of SEQ ID NO:1 or SEQ ID NO:4, or encodes the peptide in any one of SEQ ID

NO:3 or SEQ ID NO:6.

- [c12] An isolated nucleic acid according to Claim 11, wherein said cDNA sequence is of human origin.
- [c13] An isolated nucleic acid molecule according to Claim 12, wherein said human stresscopin protein comprises the sequence set forth in any one of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5 or SEQ ID NO:6.
- [c14] An isolated nucleic acid molecule according to Claim 13, wherein said nucleic acid comprises the nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:4.
- [c15] The nucleic acid of Claim 11, further comprising a vector sequence.
- [c16] The nucleic acid of Claim 15, wherein said vector comprises a transcription cassette operably linked to said stresscopin cDNA sequence.
- [c17] The nucleic acid of Claim 15, wherein said vector is a plasmid.
- [c18] The nucleic acid of Claim 15, wherein said vector is a retrovirus.
- [c19] The nucleic acid of Claim 15, wherein said vector is an adenovirus.
- [c20] An antibody that specifically recognizes a stresscopin peptide.
- [c21] A non-human transgenic animal model for stresscopin gene function wherein said transgenic animal comprises an introduced alteration in a stresscopin gene.
- [c22] A method of screening for biologically active agents that modulate stresscopin function, the method comprising: combining a candidate biologically active agent with any one of:(a) a mammalian stresscopin peptide;(b) a cell comprising a nucleic acid encoding a mammalian stresscopin peptide; or(c) a non-human transgenic animal model for stresscopin gene function comprising one of: (i) a knockout of an stresscopin gene; (ii) an exogenous and stably transmitted mammalian stresscopin gene sequence; and determining the effect of said agent on stresscopin function.